

**REMARKS**

Claims 9-11, which have been withdrawn from consideration, have now been cancelled without prejudice. Applicants reserve the right to pursue claims similar or identical to these claims in one or more applications claiming priority to this application.

Claim 5 has been amended to incorporate all of the limitations of claim 6, which depended from claim 5. Accordingly, claim 6 has been cancelled. In addition, an inadvertent typographical error was corrected in claim 5. No new matter has been added.

Claims 1-5, 7, and 8 are now pending for examination.

**Rejections under 35 U.S.C. §103(a)**

Claims 1-8 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Keyworth, *et al.* U.S. Patent No. 5,534,101 (“Keyworth”) in view of any of Chavel, *et al.*, U.S. Patent No. 5,258,024 (“Chavel”); Bonvallot, *et al.*, U.S. Patent No. 5,807,906 (“Bonvallot”); or Japanese Patent No. JP 8137375 (“JP ‘375”).

Applicants thank the Patent Office for the clarification of the rejection of method claim 5. However, Applicants wish to note that, since independent claims 1 and 5 each have at least one limitation not recited in the other claim, claims 1 and 5 do not share a genus-species relationship, and thus, it is not immediately apparent whether these claims were each rejected for the same reasons.

The Patent Office appears to be of the position that Keyworth discloses a waveguide, but none of the secondary references (i.e. Chavel, Bonvalot, or JP ‘375) discloses making waveguides. However, the Patent Office then notes that “In essence, the secondary references solve applicant’s problem of how to employ the same polymeric system and yet obtain different refractive indices as desired.” The Patent Office states that this approach is evidence of obviousness, not hindsight reconstruction.

The Patent Office has not pointed to any reference in the prior art of record that shows that the problem of employing the same polymeric system to obtain different refractive indices was a recognized problem in the prior art, or was one that those of ordinary skill in the prior art would have been aware of. The Patent Office assumes this “problem” existed (which Applicants do not

concede is accurate) to justify why these references were identified and combined, which is classic hindsight reasoning. In fact, the Applicants' claimed arrangement of forming both waveguide and cladding from a common prepolymer would be better viewed as a solution to the general challenge of conveniently fabricating waveguides, and in view of the prior art relied upon is believed to be inventive.

The Patent Office must provide an objective, articulate reason with some rational underpinning that would lead one of ordinary skill in the art to these references (*KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. \_\_\_\_ (2007), quoting *In re Kahn*, 441 F.3d 977 (Fed. Cir. 2006)). The Patent Office states that "one of ordinary skill in the optical art would have been expected to have knowledge of the various methods taught in the secondary references to alter refractive indices." If this indeed the case, the Patent Office should be able to easily identify at least one reference that indeed demonstrates this. Absent demonstration of such evidence, the Patent Office appears to have relied only on mere speculation and the Applicants' own specification as a blueprint for making this combination of references, which is improper. Accordingly, Applicants respectfully request that the Patent Office identify a reference that objectively supports what the Patent Office hypothesizes to be within the knowledge of one of ordinary skill in the art, or withdraw this rejection.

### CONCLUSION

In view of the foregoing remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after the foregoing remarks, that the application is not in condition for allowance, the Examiner is requested to call the undersigned at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

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Respectfully submitted,

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